

### ARGUMENTS/REMARKS

Applicants would like to thank the examiner for the careful consideration given the present application. The application has been carefully reviewed in light of the Office action, and amended as necessary to more clearly and particularly describe and claim the subject matter which applicants regard as the invention.

Claims 20, 22, and 24-41 are pending in this application. Claims 1-19, 21, and 23 have been canceled. The examiner has acknowledged that claims 38-42 would be allowable if put into independent format. However, because applicant traverses the rejection of their parent claims, claims 38-42 have not been put into independent format.

The examiner objected to the title for not being descriptive. A new title has been provided, making the objection moot.

The examiner objected to claims 22 and 37 for using the acronym "QMS". The acronym has been defined in claims 22 and 37, making the objection moot.

Claims 18-21 were rejected under 35 U.S.C. §102 as being anticipated by Miller *et al.* (U.S. 5,784,569). Claims 22-37 were rejected under 35 U.S.C. §103(a) as being unpatentable over Miller in view of Brash *et al.* (U.S. 5,485,586). For the following reasons, the rejections are respectfully traversed.

Claim 20, as amended, recites a system having an "arbiter" for "for allocating bus mastership to the bus masters" with the arbiter being arranged so that "the amount of time that each bus master can gain bus access is a percentage of the total bus time". The system also has means for "allocating priority levels for bus mastership when a given bus master does not request bus mastership during its allocated percentage of time". Claim 22 recites similar limitations at lines 5-11 and claim 37 recites similar limitations at lines 8-10 and 25-28. Neither reference suggests these elements as limited by the claim language.

The Examiner cites Miller at col. 6, line 63 through col. 8, line 14 as teaching means for allocating priority levels as recited in the claims. However, a close reading of these passages does not support the Examiner's contention.

The cited section does not disclose any prioritization scheme for allocating priority levels when a bus master does not request bus mastership. Instead, the reference teaches using a dual priority arbitration procedure that uses a first and second tier bus mastership allocation using a first and second arbitration ring (82, 84) that each utilize a round robin procedure (see col. 7, lines 1-12). One ring is a high priority arbitration ring 82 for allocating guaranteed bandwidth, whereas the second ring is a normal priority arbitration ring 84 that allocates unguaranteed bandwidth (col. 7, lines 30-37 and Fig. 3). However, there is no teaching of a *means for allocating priority levels* as recited in the claim. In fact, the scheme of Miller, if devices (e.g. A and C) that are allocated time slots on ring 82 either run out of time or have unused time slots, then other devices (e.g., B and D-H) on ring 84 can be allocated additional time (col. 8, lines 15-19). But there is no means for allocating priority levels, as recited in the claim.

Accordingly, claims 20, 22 and 27 are patentable over Miller. Further, because Brash does not overcome the shortcomings of Miller, claims 20, 22, and 27 are patentable over the combination as well. The remaining claims, each of which depends, directly or indirectly, on one or more of claims 20, 22, and 27, are thus patentable over either and both of the reference for at least the same reasons.

Further, the Examiner has not provided the proper motivation for combining the references. The burden is on the Examiner to make a prima facie case of obviousness (MPEP §2142). To support a prima facie case of obviousness, the Examiner must show that there is some *suggestion* or *motivation* to modify the reference (MPEP §2143.01). The mere fact that references *can* be combined or modified, alone, is not sufficient to establish prima facie obviousness (*Id.*). The prior art must also suggest the *desirability* of the combination (*Id.*). The fact that the claimed invention is within the *capabilities* of one of ordinary skill in the art is not sufficient, by itself, to establish prima facie obviousness (*Id.*).

The Examiner has cited no support for any such suggestion or motivation for the combination from within the references, and neither does the Examiner provide any references supporting any motivation to modify the reference(s) by making the combination. Instead, the Examiner merely lists a generic benefit of the combination

without explaining how such a benefit would motivate one skilled in the art to make the specific combination that the Examiner recommends. Merely listing an advantage or benefit of the combination is not sufficient, as some rationale for combining the references must be found in the references themselves, or drawn from a convincing line of reasoning based on established scientific principles practiced by one skilled in the art that some advantage or beneficial result would be produced by the combination (MPEP §2144). Such motivation cannot be found in the application itself, as such hindsight is impermissible; the facts must be gleaned from the prior art. (MPEP §2142, last paragraph).

“To reach a proper determination under 35 U.S.C. 103, the examiner must step backward in time and into the shoes worn by the hypothetical ‘person of ordinary skill in the art’ when the invention was unknown and just before it was made [and] the examiner must then make a determination whether the claimed invention ‘as a whole’ would have been obvious at that time to that person.” (MPEP §2142, emphasis added). It is not proper to merely combine various elements from various references. The invention must be obvious “as a whole”, not as a piecemeal combination of elements from various references.

Accordingly, the rejection for obviousness is not supported by the Office action and thus the rejection is improper, and should be withdrawn.

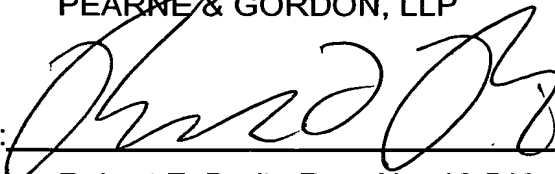
In consideration of the foregoing analysis, it is respectfully submitted that the present application is in a condition for allowance and notice to that effect is hereby requested. If it is determined that the application is not in a condition for allowance, the examiner is invited to initiate a telephone interview with the undersigned attorney to expedite prosecution of the present application.

Appl. No. 10/035,930  
Amdt. Dated July 26, 2004  
Reply to Office action of May 3, 2004

If there are any additional fees resulting from this communication, please charge same to our Deposit Account No. 16-0820, our Order No. 34260.

Respectfully submitted,

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July 26, 2004